Claims

1. Dye mixture comprising at least one dye of the formula (1)

$$O_2N \longrightarrow \begin{matrix} R_1 \\ N \\ N \end{matrix} \longrightarrow \begin{matrix} R_3 \\ N \\ R_6 \end{matrix}$$
 (1)

5 and at least one dye of the formula (2)

where

R₁ is hydrogen, halogen, nitro or cyano

R₂ is hydrogen, halogen, nitro or cyano

10 R₃ is hydrogen, halogen, C₁-C₄-alkoxy or C₁-C₄-alkyl

R₄ is hydrogen, C₁-C₄-alkyl

 R_5 is hydrogen, unsubstituted or hydroxyl-, cyano-, C_1 - C_4 -alkylcarbonyloxy-, substituted C_1 - C_4 -alkyl or C_1 - C_4 -alkenyl

R₆ is unsubstituted or hydroxyl-, cyano-, C₁-C₄-alkylcarbonyloxy-, C₁-C₄-

alkoxycarbonyl-substituted C₁-C₄-alkyl or C₁-C₄-alkenyl,

 R_7 is nitro, $C_1\text{-}C_4\text{-}alkoxy$ or the radical -SO₂CH₃

R₈ is hydrogen or C₁-C₄-alkyl,

R₉ is hydrogen or C₁-C₄-alkyl,

R₁₀ is unsubstituted or hydroxyl- or cyano-substituted C₁-C₄-alkyl,

- 20 R_{11} is unsubstituted C_1 - C_4 -alkyl or is C_1 - C_4 -alkyl which is substituted by the radical -O-COR₁₂, where R_{12} is C_1 - C_4 -alkyl.
 - 2. Dye mixtures as per Claim 1, characterized in that they contain up to 60% of a dye as per the formula (1) based on the sum total of the dyes (1) and (2).

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3. Dye mixture as per Claim 1 characterized in that it contains at least one further one of the following dyes:

$$O = \begin{array}{c} NC \\ R_{13} \\ N \\ O_{2}N \end{array}$$
 Halogen (3)

5 where

 R_{13} is C_1 - C_4 -alkyl, R_{14} is C_1 - C_4 -alkyl and Halogen denotes the halogen atoms,

$$\begin{array}{c|c}
\hline
A \\
\hline
N \\
\hline
N \\
O_2N
\end{array}$$

$$\begin{array}{c|c}
SO_2 \cdot NH \\
\hline
M \\
B
\end{array}$$
(4)

where the rings A and B may be further substituted,

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$$O = \begin{array}{c} NH - \begin{array}{c} C \\ \hline C \\ \hline N \\ \hline \end{array}$$

$$N = \begin{array}{c} D \\ \hline D \\ \hline \end{array}$$

$$(5)$$

where

R₁₅ is C₁-C₄-alkyl and the rings C and D may be further substituted,

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$$R_{32} \longrightarrow N_{N} \longrightarrow N_{R_{17}} \longrightarrow N_{R_{17}}$$
 (6)

where

R₁₆ is unsubstituted or hydroxyl- or cyano-substituted C₁-C₄-alkyl, R₁₇ is unsubstituted C₁-C₄-alkyl or C₁-C₄-alkyl which is substituted by the radical -O-COR₁₈, where R₁₈ is C₁-C₄-alkyl, R₃₂ is nitro, C₁-C₄-alkoxy or the radical -SO₂CH₃ and R₃₃ is hydrogen or C₁-C₄-alkyl,

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$$\begin{array}{c|c}
R_{19} \\
R_{20}
\end{array}$$

$$\begin{array}{c|c}
N \\
R_{22}
\end{array}$$

$$\begin{array}{c|c}
S \\
N \\
N
\end{array}$$

$$\begin{array}{c|c}
SR_{21}
\end{array}$$

$$\begin{array}{c|c}
(7)
\end{array}$$

where

 R_{19} is C_1 - C_4 -alkyl, R_{20} is C_1 - C_4 -alkyl, R_{15} is C_1 - C_4 -alkyl and R_{22} is C_1 - C_4 -alkyl or the radical -NHCOR₂₃, where R_{23} is C_1 - C_4 -alkyl,

where R₂₄ is halogen,

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$$\begin{array}{c|c}
R_{25} \\
N \\
R_{26}
\end{array}$$

$$\begin{array}{c|c}
R_{27} \\
R_{28}
\end{array}$$

$$\begin{array}{c|c}
R_{27} \\
R_{28}
\end{array}$$

$$\begin{array}{c|c}
R_{28}
\end{array}$$

where

R₂₅ is cyano, nitro or halogen, R₂₆ is halogen, R₂₇ is unsubstituted or hydroxyl-substituted C₁-C₄-alkyl and R₂₈ is unsubstituted or hydroxyl-substituted C₁-C₄-alkyl and the naphthyl ring E may be further substituted, and/or

where

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 R_{26} is C_1 - C_4 -alkyl or the radical NHCOR₁₇, where R_{17} is C_1 - C_4 -alkyl, R_{27} is C_1 - C_4 -alkyl or C_1 - C_4 -alkyl and R_{28} is C_1 - C_4 -alkyl or C_1 - C_4 -alkyl alkylcarbonyloxy- C_1 - C_4 -alkyl.

4. Dye mixtures as per Claim 1 characterized in that the at least one dye of the formula (1) the formula (1') and at least one dye of the formula (2'):

$$O_2N$$
 O_2N
 O_2N

and the at least one dye of the formula (2) the formula (2')

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

- 5. Use of dye mixtures as per Claim 1 for dyeing or printing semisynthetic or synthetic hydrophobic fibre materials comprising cellulose acetate.
- 6. Use of dye mixtures as per Claim 1 for dyeing or printing fibrous structures comprising polyester and/or cellulose secondary acetate.
- 7. Fibrous structures dyed or printed with a dye mixture as per Claim 1.